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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,549	12/28/2004	Alexander Wartini	263100US0PCT	2742
22850	7590	05/08/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			WITHERSPOON, SIKARL A	
			ART UNIT	PAPER NUMBER
			1621	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/519,549	Applicant(s) WARTINI ET AL.	
	Examiner Sikarl A. Witherspoon	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The examiner has considered applicants' amendment filed March 9, 2006 and the arguments therein. In light of said amendments, the examiner has withdrawn the rejection of record over the Bost reference (Perfumer and Flavorist, Vol. 7); however, the following rejections have been maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 6, 8, 12, 14-16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruzicka (US 1,702,843).

Ruzicka discloses a process for making macrocyclic ketones by cyclization of a dicarboxylic acid at a temperature between 300 and 500° C with titanium hydroxide, and in another example, with titanium oxide, to produce the macrocyclic ketone (examples 2 and 4). The processes disclosed by Ruzicka anticipate the instant claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 7, 9-11, 13, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruzicka (US 1,702,843).

The instant claims further limit the cyclization process of the present invention to the catalyst being employed as a fixed-bed catalyst, the catalyst being titanium dioxide doped with alkali metal or alkaline earth metal oxides, the ketone produced being exaltone or civetone.

Ruzicka does not teach these specific limitations; however, the examiner takes the position that the instant claims are rendered obvious since, for one, a person of ordinary skill would at his or her own discretion, employ the heterogeneous catalyst, in this case, the titanium hydroxide or titanium oxide catalyst taught by Ruzicka in a fixed-bed, fluidized bed, or any other catalytic system that would have been found to optimally catalyze the cyclization reaction. In addition, it is known in the art that such metals as titanium (or any other transition metal) can be doped with other metals of the same groups or with alkali or alkaline earth metals in order to affect the activity of the catalyst, either by enhancing the activity, or in some cases, to deactivate, or lessen the activity of the catalyst. Although Ruzicka does not recite a specific example of exaltone or civetone being made, it would have been obvious to a person of ordinary skill in the art,

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presented with Ruzicka's disclosure, that the generic structure of the starting material encompasses alkyl derivatives of dicarboxylic acids that if employed as reactant would result in the production of ketones such as civetone and exaltone, thereby rendering this limitation obvious as well.

Response to Arguments

Applicant's arguments filed March 9, 2006 have been fully considered but they are not persuasive. The thrust of applicants' arguments is that at the temperatures used in Ruzicka (US 1,702,843), 300 to 550° C, the mixture of the starting material and titanium dioxide or titanium hydroxide will also form salts of the starting materials, such salts not being volatile at the temperature at which the reaction is conducted. Therefore, the cyclization reaction taught by Ruzicka must take place in a condensed phase; applicants' process takes place in the gas phase.

The examiner does not find this argument persuasive. Ruzicka does not expressly mention the phase in which the reaction takes place. The examiner would like to point out that applicants' dependent claim 2 recites a process limitation wherein the reaction takes place at temperatures from 200 to 600° C. Clearly, applicants' temperatures encompass the temperature range of 300 to 550° C taught by Ruzicka. Unless applicants are in effect stating that their process is actually one that is conducted in the condensed phase, contrary to the gas phase process that is recited in the claims, as they allege is occurring in Ruzicka, the examiner contends that the process taught by Ruzicka is a gas phase process, since the catalyst *must* be volatile at the temperature

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range taught therein, since said range is encompassed by applicants' own temperature range. The rejection of record relying on Ruzicka is therefore deemed proper.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikarl A. Witherspoon whose telephone number is 571-272-0649. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Sikarl A. Witherspoon

SIKARL A. WITHERSPOON
PATENT EXAMINER